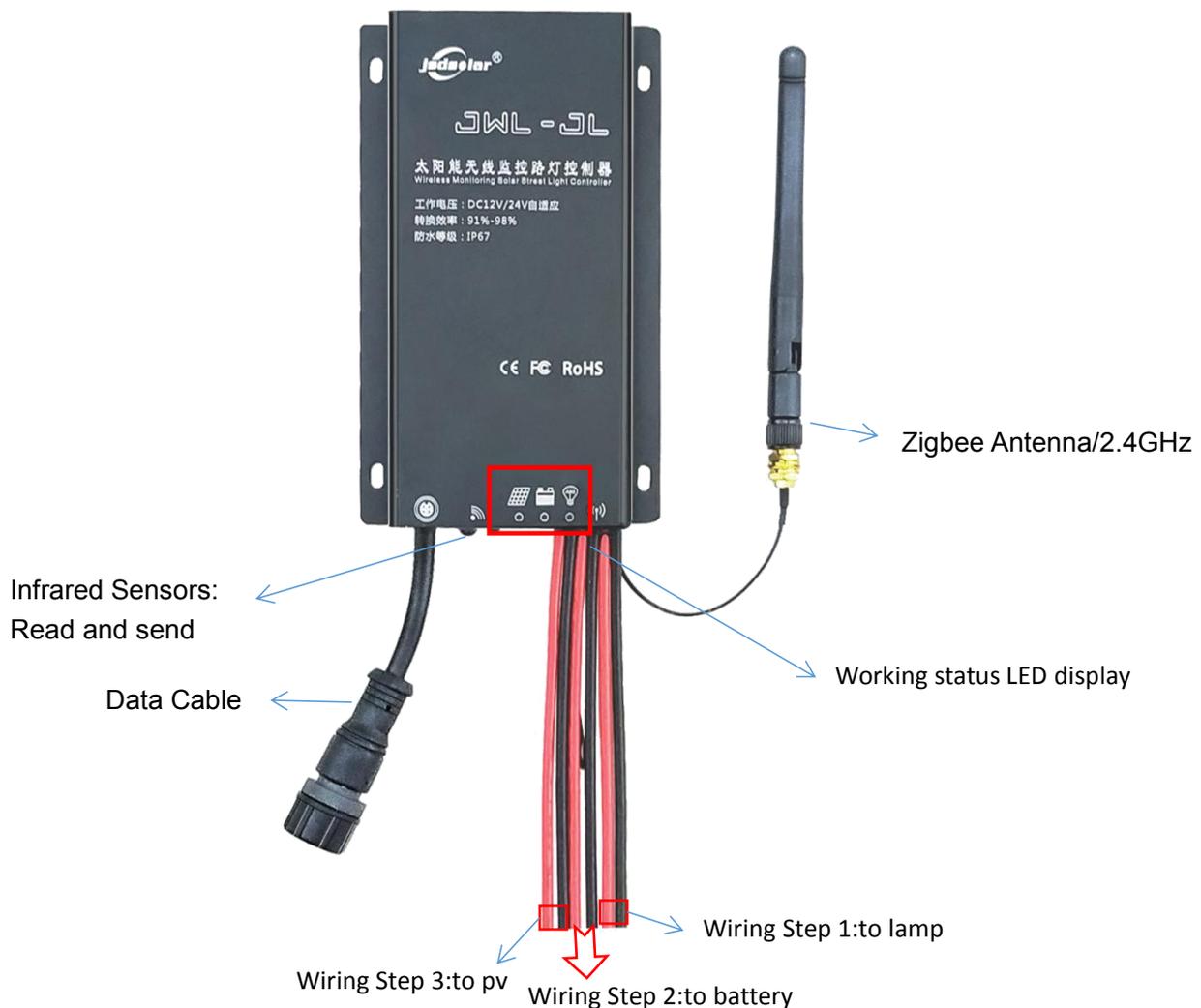


Part 1. JWL-JL Wireless Solar Street Light Charge Controller

1. Introduction

JWL-JL series intelligent controller is the first one solar light controller combined with solar charge controller and ZigBee module all in one, and also through GPRS concentrator to remote monitored by PC or Cellphone APP. This controller is integrated with led driver and infrared sensor, with time and dimming function. Users not only can program battery types, charging voltage, time and dimming value via a remote control JSD-RC to all JWL-JL series controllers, but also can program the above parameters from PC software and APP. It is also with self-dimming function to automatically control solar LED lights turning on/off 365 days.



Model Choice:

- ◆ JWL-JL-10A 12V24V auto, 30W/12V 60W/24V
- ◆ JWL-JL-15A 12V24V auto, 40W/12V 80W/24V

- Integrated Zigbee device, constant current led driver, infrared sensors all in one, easy installation, lower self-consumption and high efficiency
- Zigbee device is to remote control all solar street lights: control led lights' working, collect solar panel, solar battery and led lights working data, broken alarming and examining, ect and transmit data one controller to others
- Build-in constant current LED driver, with 91%-96% output efficiency
- With infrared sensor, by one remote control to program parameters to all controllers
- With Antenna that must install outside box
- Electric protection: over-load, reverse connecting, short-circuit and battery charging and discharging protection, ect
- Self-dimming function based on battery capacity to ensure 365 nights turned on.
- Waterproof IP67, suitable for high or low temperature environment
- LED indicators display to show all solar street light's working status
- Suitable for all kinds of battery: gel/AGM/li-ion/Lifepo4 battery or users defined

3. Protection:

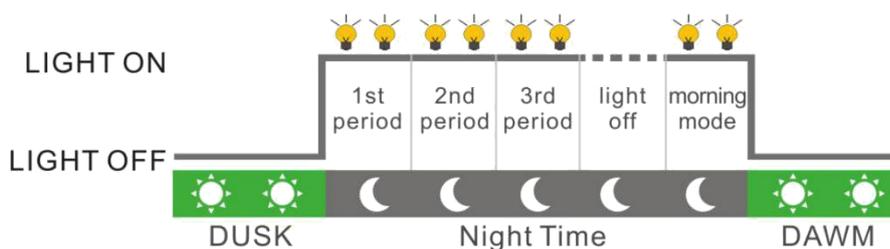
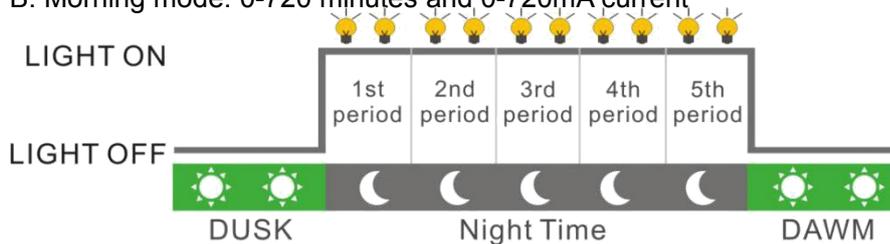
- ◆ PV reverse polarity protection
- ◆ Battery reverse polarity protection
- ◆ Battery over charge protection
- ◆ Battery over discharge protection
- ◆ Load short circuit protection
- ◆ Load overload protection

4. Lighting control option:

Light on + time + dimming, then time+dimming+motion sensor

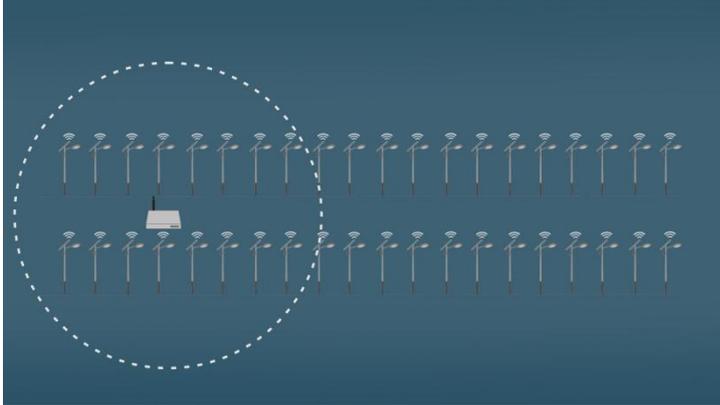
A. 1st period: 0-720 minutes and 0-2700mA current

B. Morning mode: 0-720 minutes and 0-720mA current



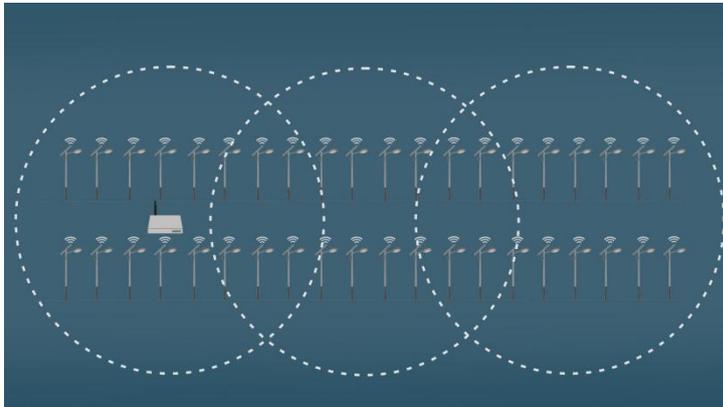
5.Communication Mode

1. Terminal Mode:



Each solar street lamp nodes receive and transfer data from/to GPRS concentrator directly. The radius is less than 1.5km.

2. Router Mode:



One solar street lamp node receive and transfer data to other node one by one till to Concentrator. The Radius is less than 1.5km.

6. Technical Specification

Model	JWL-JL-10A	JWL-JL-15A
Rated charge current	10A	15A
Rated load current	30MA-2.7A (adjustable)	
Rated load voltage	Battery voltage-60V (Automatically set-up)	
Max. Output power	30W/12V 60W/24V	40W/12V 70W/24V
LED constant current efficiency	≥ 92.8% (typically 94.5%) 24V, system is available for 95.3%	
System voltage	□12V; □24V/12V AUTO;	
Solar PV input voltage	<50V	
Solar PV power	180W/12V; 360W/24V	270W/12V; 540W/24V
Load loss	Normal mode ≤ 7 mA, power-saving mode ≤ 3.5 mA	
Operating temperature	Industrial: -35 °C to +55 °C (suffix I);	
Boosting voltage	14.6V; × 2/24V (duration: 10min) (Adjustable)	
Equalize voltage	14.4V; × 2/24V(duration: 10min)	
Float voltage	13.6V; × 2/24V (Adjustable)	
Charge return voltage	13.2v; ×2/24V	
Temperature compensation	-4.5mv / °C / 2V	
Under voltage warning voltage	12.0V; ×2/24V	
Over-discharge voltage	11.1V ; × 2/24V (Adjustable)	
Over-discharge voltage return	12.6V; ×2/24V (Adjustable)	
Light control voltage	5V (Adjustable)	
Dimension/N.W	133*74*26mm/0.36kg	
JSD-RC remote control	Only one can control all JWL-JL series solar controllers	
Inside battery type	AAA battery	
Voltage	3V	
Sending distance	<10 m	
Reading distance	< 7 m	
Dimension and Weight	140*56*17mm/ 90g	

√ The default battery type is sealed lead acid, Gel or flooded.

√ Users can change the battery type, charging voltage and other parameters as need.